



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,805	07/26/2001	Michael Heaton	60,130-1109; 01MRA0216	7507

7590

08/12/2002

David J. Gaskey
CARLSON, GASKEY & OLDS, P.C.
400 West Maple Road, Suite 350
Birmingham, MI 48009

EXAMINER

TORRES, MELANIE

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 08/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/915,805

Applicant(s)

HEATON ET AL.

Examiner

Melanie Torres

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitations "the arm" and "the support" in lines 2 and 3 respectively. There is insufficient antecedent basis for these limitations in the claim. It appears that claim 6 should depend from claim 5. Correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5, and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Arnold et al.

Re claim 1, Arnold et al. discloses a parking brake comprising an engaging portion that is moveable into a braking position (26), a spring (30) that biases the engaging portion into the braking position and an electrically powered actuator (50) that

moves the spring against the bias of the spring to thereby release the engaging portion from the braking portion. (Column 3, lines 32-41)

Re claim 2, Arnold et al. discloses wherein the actuator (50) comprises an electric motor.

Re claim 5, Arnold et al. discloses an arm (36) associated with the actuator and a support (80) near one end of the arm, the support engaging the portion of the spring such that movement of the arm causes movement of the spring against the bias of the spring.

Re claim 7, Arnold et al. discloses wherein the actuator (50) moves into a disengage position where the engaging portion is released from the braking position when the actuator is energized at a first level and the actuator releases the spring to bias the engaging portion into the braking position when the actuator is energized at a second level.

Re claim 8, Arnold et al. discloses wherein the second level includes the actuator (50) being de-energized.

Re claim 9, Arnold et al. discloses a control switch (170) that is actuatable by an operator of the vehicle and wherein the control switch controls the supply of electrical power to the actuator.

Re claim 10, Arnold et al. discloses an electronic controller (100) that regulates power supplied to the actuator.

Re claim 11, Arnold et al. discloses wherein the controller (100) automatically cuts off power to the actuator under selected conditions. (Column 4, lines 59-64)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al.

Re claims 3 and 4, Arnold et al. does not teach wherein the actuator comprises a servo motor or a linear actuator. It would have been obvious for the actuator of Arnold et al. to have comprised a servo motor or a linear actuators as both are well known means of actuation in parking brakes.

Art Unit: 3683

Re claim 6, Arnold et al. as modified teach wherein an arm (36) rotates about an axis of the arm and the rotation of the arm causes linear movement of a support (80).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Heimann, Richard, Taig, and Shikata disclose a parking brake comprising an engaging portion that is moveable into a braking position, a spring that biases the engaging portion into the braking position and an electrically powered actuator that moves the spring against the bias of the spring to thereby release the engaging portion from the braking portion.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Torres whose telephone number is (703)305-0293. The examiner can normally be reached on Monday-Friday, 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703)308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-2571 for regular communications and (703)308-2571 for After Final communications.

Art Unit: 3683

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.

MT
August 1, 2002


JACK LAVINDER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600
8/2/02